GOLDFARB, W., D. M. LEVY and D. I. MEYERS, 1966, The verbal encounter between the schizophrenic child and his mother. In: *Developments in psychoanalysis at Columbia University*, edited G. S. Goldman and D. Shapiro. New York–London, Hafner Publishing Company.

MEYERS, D. I. and W. GOLDFARB, 1961, Studies of perplexity in mothers of schizophrenic children. *Amer. J. Orthopsychiat.* **3**, 551–564.

MORRIS, G. O. and L. C. WYNNE, 1965, Schizophrenic offspring and parental styles of communication. *Psychiatry* **28**, 19–44.

SINGER, M. T. and L. C. WYNNE, 1965, Thought disorder and family relations of schizophrenics. *Arch. Gen. Psychiat.* **12**, 187–212.

WYNNE, L. C. and M. T. SINGER, 1963, Thought disorder and family relations of schizophrenics. *Arch. gen. Psychiat.* **9**, 191–206.

SHELDON ROSENBERG, ed.: *Directions in psycholinguistics*. New York, The Macmillan Company, 1965, 260 pages, $7.50.

Directions in psycholinguistics is a collection of papers originally presented at an Institute on Psycholinguistics held at George Peabody College for Teachers in 1963. Rosenberg's statement of what he and his colleagues see as 'some of the major directions of contemporary thinking', in psycholinguistics guided their selection of research areas discussed at the Institute. One might take issues with their choices, since the range of topics does not adequately reflect a large segment of psycholinguistic research, theory and application which even in 1963 was being reported in the literature. However, it is obvious that all topics could not be covered in a two-week-period.

The book is frankly biased in the direction of the psychologist's contribution to research and theory in the field. Only one chapter, that by Saporta and his collaborators, was prepared by linguists. Thus, it would be difficult to evolve a conceptualization of psycholinguistics as representative of the integration of linguistics and psychology to the understanding of language and language behavior by reading this book. Rosenberg does not deny the important contribution made by the linguist, and this bias in no way detracts from the value of the papers presented.

As is often the case with books that are collections of papers, there is only a minimal degree of continuity. *Directions in psycholinguistics* is no different in this regard. Unfortunately, the discussion of the papers by the participants was not included. To have added such material would have greatly enhanced the value of the book.

Rosenberg and Koplin in their introductory chapter attempt to provide background material on psycholinguistics as well as individual contributions, but this effort falls somewhat short of its intended mark. They offer only a superficial description of research areas which gives little insight to the complexity and depth of the field. The better part of their chapter serves to introduce the areas taken up by the individual papers.

Beyond the introduction the major sections of the book are: The psychology of grammar (three papers); Psycholinguistics and verbal learning (two papers); Modification of verbal behavior; Individual differences in verbal behavior; Psycholinguistics and language pathology, each having only one paper.

The first formal paper contributed by Saporta et. al., provides only a minimal background with reference to the material covered. Anyone not familiar with generative grammars and the models underlying it, will find the going somewhat rough. On the other hand, the two other papers in the section on the 'Psychology of grammar' (Johnson and Jenkins), begin at a more elementary level. They provide the reader with excellent reviews of the areas under consideration. The newcomer to psycholinguistics will find these papers an excellent introduction to approaches to research and theory from the psychologist's point of view. Research carried out and reported by Johnson and Jenkins are neatly incorporated within the conceptual framework provided in their introductory statements.

Underwood's paper in the section on 'Psycholinguistics and verbal learning', illustrates areas of overlapping interest for the traditionally oriented experimental psychologist interested in verbal behavior and the psycholinguist. He reviews some major theories and research problems 'tantalizing workers in the verbal learning laboratory'. The research he reports however, is in the mold of the typical verbal learning paradigms, and is not cast in terms of psycholinguistic problems.

Rosenberg's paper in this section takes up problems related to points made by Underwood. He reports on four studies of grammatical and associative habits. Rosenberg discusses his results in terms of research and theory related to these problems. His conclusion that more research is needed before the relationship between grammatical form class and verbal learning can be specified seems obvious. It would have been useful if he could have gone beyond his data to suggest the direction of such research.

Spielberger's paper on the 'Theoretical and Epistemological Issues in Verbal Conditioning', is an excellent review of recent work and theory concerned with issues of awareness, conditioning procedures, and in particular the contributions of Greenspoon. In addition to the review, Spielberger also reports some of his own work. However interesting problems of verbal conditioning might be, the route he takes seems only indirectly related to the central core of psycholinguistics. Spielberger's conclusion that awareness of the response–reinforcement contingency is what *S* learns, is of significance when examined in the light of recent contributions by Russian and American psychologists in the area of verbal control and regulation of behavior.

Individual differences in verbal behavior is represented by a single paper by J. C. Nunnally. The paper is theoretic rather than data-oriented. Much of the basic theory and evidence has already appeared in print in a series of papers by Nunnally and his colleagues. He applies the Whorf–Sapir concept of 'linguistic relativism' to deal with two basic questions; (a) why do people learn particular words, and (b) once particular words are learned, what effects do they have on behavior in general? He makes use of work in verbal learning and conditioning as well as perception to support his view that there are significant relations between a person's word usage and learning, perception and personality in terms of individual differences. In addition to the theoretical exposition, Nunnally presents three experiments to illustrate his points.

The last section of the book deals with psycholinguistics and language pathology. Jones and Wepman present a brief paper showing how the study of language disruptions can be approached via the tools of psycholinguistics, and in turn how the analysis of such language output can be utilized in the understanding of normal language function. They attempt to develop a model of language function from which language disruption can be viewed. The strength of their classification system lies in the extensive analyses of free speech of aphasic patients. They attempt to show how their conception of aphasia is linked to similar approaches to classification proposed by Jakobson and Konorski. Jones and Wepman also try to relate various types of aphasic patterns to stages of language acquisition. Much of the work discussed has appeared elsewhere in greater detail. However, the paper seems to reintroduce psychologists, linguists and of course psycholinguists to problems of language pathology.

There is no doubt that each of the papers presented opened new vistas to the audience at the Institute on Psycholinguistics. However, the effect of that contribution does not emerge from reading *Directions in psycholinguistics*. The papers offer little that is new, or not already available in other more familiar sources. The lack of continuity and emphasis on specific pieces of research does not give the novice a good foothold on the subject. *Directions in psycholinguistics* does provide an interesting but narrow overview of psycholinguistics. It is not, however, a work which will be useful as a significant reference work or text in the field.

RONALD S. TIKOFSKI
The University of Michigan
Michigan